

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: MSL-0004-00(430), STP-0002-00(392) Gwinnett **OFFICE:** Engineering Services
BRST-054-1(63) Gwinnett
P. I. Nos.: 0004430, 0002392, & 132985
S.R. 20 Widening/Reconstruction

DATE: June 26, 2008

FROM: Brian Summers, P.E., Project Review Engineer *RES*

TO: Brent Story, P.E. State Road and Airport Design Engineer

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & LCC	Implement	Comments
RIGHT OF WAY				
A-2.1	Reduce Right of Way to the back of shoulder (P.I. No. 0002392)	\$2,414,000	Yes	This should be done.
A-2.2	Reduce Right of Way to the back of shoulder (P.I. No. 132985)	\$339,200	Yes	This should be done.
A-2.3	Reduce Right of Way to the back of shoulder (P.I. No. 0004430)	\$4,973,000	Yes	This should be done.

RIGHT OF WAY - continued				
A-4.1	Reduce shoulder width (P.I. No. 0002392)	\$1,868,000	No	There are more than 34 driveways on this project where the sidewalk would have to be wrapped around the back of the driveway for ADA compliance. In addition there are numerous utilities located along the corridor such as Sawnee EMC, Ga. Power, AT&T, Atlanta Gas, Comcast, Forsyth Co. Water, City of Cumming Water and Sewer, etc.
A-4.2	Reduce shoulder width (P.I. No. 132985)	\$260,000	No	There are numerous driveways along this project where the sidewalk would have to be wrapped around the back of the driveway for ADA compliance. In addition there are numerous utilities located along the corridor such as Gwinnett County Water and Sewer, Sawnee EMC, Atlanta Gas, BellSouth, Forsyth Co. Water, City of Sugar Hill Gas, Charter Communications, etc.
A-4.3	Reduce shoulder width (P.I. No. 0004430)	\$2,371,000	No	There are more than 89 driveways along this project where the sidewalk would have to be wrapped around the back for ADA compliance. In addition there are numerous utilities located along the corridor such as Gwinnett County Water and Sewer, Ga. Power, Sawnee EMC, City of Sugar Hill Gas, BellSouth, Prestige Cable, etc.

ALT No.	Description	Savings PW & LCC	Implement	Comments
ASPHALTIC CONCRETE PAVEMENT				
B-1.1	Reduce lane width (P.I. No. 0002392)	\$724,600	No	Based on the traffic volumes (43,665 A. D. T.) and 7.5% trucks.
B-1.2	Reduce lane width (P.I. No. 132985)	\$96,700	No	Based on the traffic volumes (43,665 A. D. T.) and 7.5% trucks.
B-1.3	Reduce lane width (P.I. No. 0004430)	\$923,300	No	Based on the traffic volumes (43,665 A. D. T.) and 7.5% trucks.
B-2.1	Realign Burnette Trail	\$258,800	Yes	Burnette Trail will be re-aligned as much as possible; however, the exact location will be determined after a more intensive engineering study has been finalized.
B-3.1	Retain Echols Road/Holly Court alignment	\$610,000	No	Would require the two intersections be offset by 465'± and would result in a median opening at only one location which would require vehicles to make a U-turn to access the other intersecting side road. Holly Court currently has a 60°± skew.
BRIDGE				
C-1	Optimize the S.R. 20 bridge alignment to reduce bridge length	\$110,000	No	This would result in additional impacts to a Rainbow Trout Farm, a Car Wash and/or 4f Parklands.
C-2	Reduce travel lane width from 12' to 11'	\$301,000	Yes	This should be done.
C-3A	Reduce sidewalk width to 6' on the bridge	\$602,000	Yes	This should be done.
C-3B	Eliminate the sidewalk on one bridge and reduce it to 6' on the other	\$1,053,000	No	This no longer applies since VE Alternative "C-3A" will be implemented.
C-5	Reduce/eliminate spanning the flood plain	\$2,200,000	Yes	This should be done.

ALT No.	Description	Savings PW & LCC	Implement	Comments
BRIDGE - continued				
C-7	Use high strength concrete girders	\$1,209,000 (proposed) \$1,000,000 (actual)	Yes/partial	While high strength concrete girders will not be used, it has been determined that a center pier can be placed in the Chattahoochee River which still results in a cost savings from what was originally proposed.
C-8A	Reduce the inside shoulder width to 4'; retain the two sidewalks at 6'	\$1,505,000 (proposed) \$601,200 (actual)	Yes/partial	The sidewalks will be reduced to 6'; however, the inside shoulder will be kept at 10' to provide a refuge area in case a vehicle becomes disabled. The bridge is 800'± long.
C-8B	Reduce the inside shoulder to 2' and remove the sidewalks on both bridges	\$2,709,000	No	This no longer applies since VE Alternative "C-8A" will be implemented.
C-11	Lower road profile at bridge location	\$288,000	No	This would result in additional staging issues. In addition, as part of the mitigation for utilizing National Park Service property an access trail is to be built under the bridge which would not be feasible if the profile was lowered.
C-13	Use drain scupper where allowed	\$232,000	No	This is part of the mitigation required for utilizing National Park Service property for this project.
DRAINAGE				
G-1.1 G-1.3	Optimize storm drainage layout	\$569,400	Yes	This should be done.
G-2.3	Do not use a bottomless culvert	Design Suggestion	Yes	This should be done.

A meeting was held on May 5, 2008 to discuss the above recommendations. Alan Chapman and John Ray with Gwinnett County, Tim Allen with Forsyth County, Shrujal Amin, Jimmy Vaughan, and Chris Parypinski with Moreland Altobelli, Richard Meehan with Lowe Engineers, Asad Hadadzadeh with Precision Planning, Brent Story, Jason

McCook, and Brad McManus with Road Design and Brian Summers, Ron Wishon and Lisa Myers with Engineering Services were in attendance.

Additional information was provided by the Project Manager on June 23, 2008.

The results above reflect the consensus of those in attendance and those who provided input.

Approved:  Date: 6/26/08
Gerald M. Ross, P. E., Chief Engineer

BKS/REW

Attachments

c: Gus Shanine
Todd Long
Brent Story
Jason McCook
Brad McManus
Nasser Rad
James Magnus
Randy Davis
Brandon Kirby
Paul Liles
Bill Ingalsbe
Bill Duvall
Jack Muirhead
Paul Alimia
Ken Werho
Nabil Raad
Lisa Myers

Preconstruction Status Report By PI Number

Print Date: 06/24/2008

<i>PROJ ID</i>	<i>COUNTY</i>	<i>DESCRIPTION</i>	<i>MGMT. ROW DATE</i>	<i>SCHED DATE</i>	<i>MGMT. LET DATE</i>
0002392	Forsyth	SR 20 FM CR 80/SAMPLES RD TO CR 450/JAMES BURGESS RD	Sep-08	Oct-11	Mar-10

STP00-0002-00(392) **FIELD DIST:** 1
TIP #: FT-061D **TWIN:** **US:**
MPO: Atlanta TMA **EST DATE:** 4/16/2008
MODEL YR: 2020
PROJ MGR: McManus, Brad **PROJ LENGTH:** 2.68
PROG Reconstruction/Rehabili **TYPE** Widening
TYPE: tation **WORK:**
CONCEPT: **LET RESP:** DOT

<i>Phase</i>	<i>Approved</i>	<i>Proposed</i>	<i>Cost</i>	<i>Fund</i>	<i>Status</i>
<i>PE</i>	2005	2005	664,607.06	Q24	AUTHORIZED
<i>ROW</i>	2008	2009	31,407,446.43	L240	PRE CST
<i>CST</i>	LR	LR	31,297,078.59	L240	PRE CST

<i>SCHED START</i>	<i>SCHED FINISH</i>	<i>ACTIVITY</i>	<i>ACTUAL START</i>	<i>ACT/EST FINISH</i>	<i>PCT</i>	<i>DISTRICT COMMENTS</i>
		Define Project Concept	10/29/2004	3/21/2005	100	Consultant Design thru Forsyth
		Concept Meeting	3/29/2005	3/29/2005	100	County, MAAI. Waiting on
		Concept Submittal and Review	7/13/2005	7/13/2005	100	enviromental studies.
		Receive Preconstruction Concept Approval	7/27/2005	8/4/2005	100	Enviromental document tied to PI
		Management Concept Approval Complete	8/8/2005	8/15/2005	100	0004430 and 132985. (last update
7/9/2008	7/15/2008	Value Engineering Study	8/23/2007		97	5-23-06)
		Public Information Open House Held	7/19/2005	7/19/2005	100	
7/4/2008	12/2/2009	Environmental Approval			0	
9/9/2009	9/9/2009	Public Hearing Held			0	
		Mapping	1/2/2006	1/20/2006	100	
7/4/2008	7/10/2008	Field Surveys/SDE	2/2/2006		99	
7/3/2008	7/3/2008	Preliminary Plans	8/30/2005		100	
10/31/2008	10/30/2008	Preliminary Bridge Design	3/1/2008		51	
7/4/2008	8/8/2008	Underground Storage Tanks			0	
7/22/2008	11/3/2008	404 Permit Obtainment			0	
		PFPR Inspection	3/27/2008	3/27/2008	100	
8/8/2008	10/30/2008	R/W Plans Preparation			0	
12/26/2008	12/31/2008	R/W Plans Final Approval			0	
12/3/2009	12/7/2009	L & D Report Development and Approval			0	
1/1/2009	8/30/2011	R/W Acquisition			0	
3/12/2010	3/25/2010	Stake R/W			0	
		Soil Survey	6/7/2006	7/6/2006	100	
8/8/2008	9/15/2008	Bridge Foundation Investigation			0	
12/8/2009	10/11/2010	Final Design			0	
1/6/2010	4/27/2010	Final Bridge Plans Preparation			0	
11/2/2010	11/3/2010	FFPR Inspection			0	
11/17/2010	11/30/2010	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: N MEASUREMENT SYSTEM: E CONSULTANT: L UT EST:

PDD: MAR01 LR: ASSIGNED ROAD DESIGN. Need 07 RW. 11/8/04.
Bridge: BRIDGE REQUIRED
Design: BM: MAAI/Need Environmental Doc/Preparing for PFPR
EIS: NP | LR | ALIMIA
LGPA: PMA SGN FORSYTH DO PE & UTILITIES 6-6-04.
Planning: coordinate w/ 0004430 & 132985
Programming: #1 9-05
Traffic Op: SEND PLANS4REV. PFPR SET|10/31/05 \$-|PFPRsent3/20/08W/R
Utility: 1ST TO PM 09/18/06
EMG: RECST/REHAB (WIDENING); PE BY COUNTY

R/W INFORMATION:

<u>PREL PARCEL CT:</u> 63	<u>TOTAL PARCEL CT:</u>	<u>ACQUIRED BY:</u> DOT	<u>ACQ MGR:</u>		
<u>UNDER-REVIEW CT:</u>	<u>RELEASED CT:</u>	<u>OPT-PEND CT:</u>	<u>DEEDS CT:</u>	<u>COND-PEND CT:</u>	<u>COND-FILED CT:</u>
<u>RW CERT DT:</u>	<u>ACQUIRED CT:</u>	<u>RELOCATION CT:</u>			



Preconstruction Status Report By PI Number

Print Date: 06/24/2008

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
132985-	Forsyth, Gwinnett	SR 20/CUMMING HWY @ CHATTAHOOCHEE RIVER @ FORSYTH CO	Sep-08	Oct-11	Sep-10
LINE					
BRST0-0054-01(063)	FIELD DIST: 1				
TIP #: GW-020A2	TWIN: 0004430	US:	Phase	Approved	Proposed
MPO: Atlanta TMA	EST DATE: 4/16/2008		PE	2000	2000
MODEL YR: 2020			ROW	2008	2008
PROJ MGR: McManus, Brad	PROJ LENGTH: 0.73		CST	2011	2011
PROG Replacement	TYPE Bridges		CST	2011	2011
TYPE:	WORK:				
CONCEPT: BRIDGE	LET RESP: LOC	Congressional		9, 7	

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	2/4/2005	11/24/2005	100	Local Design Consultant, Lowe
		Concept Meeting	12/2/2005	12/2/2005	100	
		Concept Submittal and Review	11/16/2005	11/16/2005	100	
		Receive Preconstruction Concept Approval	2/14/2006	2/21/2006	100	
		Management Concept Approval Complete	2/21/2006	2/28/2006	100	
7/9/2008	7/15/2008	Value Engineering Study	8/23/2007		97	
7/18/2008	7/18/2008	Public Information Open House Held			0	
7/4/2008	12/2/2009	Environmental Approval			0	
9/9/2009	9/9/2009	Public Hearing Held			0	
		Mapping	4/1/2006	4/20/2006	100	
7/4/2008	7/10/2008	Field Surveys/SDE	4/1/2006		99	
		Preliminary Plans	3/1/2006	3/7/2008	100	
7/3/2008	7/3/2008	Preliminary Bridge Design	3/10/2008		100	
7/4/2008	8/8/2008	Underground Storage Tanks			0	
7/22/2008	11/3/2008	404 Permit Obtainment			0	
		PFPR Inspection	3/26/2008	3/26/2008	100	
8/8/2008	10/30/2008	R/W Plans Preparation			0	
12/26/2008	12/31/2008	R/W Plans Final Approval			0	
12/3/2009	12/7/2009	L & D Report Development and Approval			0	
1/1/2009	8/30/2011	R/W Acquisition			0	
3/12/2010	3/25/2010	Stake R/W			0	
8/8/2008	8/20/2008	Soil Survey			0	
8/8/2008	9/15/2008	Bridge Foundation Investigation			0	
12/8/2009	10/11/2010	Final Design			0	
1/6/2010	5/25/2010	Final Bridge Plans Preparation			0	
11/2/2010	11/3/2010	FFPR Inspection			0	
11/17/2010	11/30/2010	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: Y MEASUREMENT SYSTEM: E CONSULTANT: R UT EST: \$ 0.00

PDD: Re-assigned to Road Design. 2/17/03.
Bridge: STB 04/01/08 CONSUL - LOWE
Design: McManus need Env started prelim des (Lowe) Local W/0004430
EIS: EA|NotApvd|NotonSchedforSeptROW|Alimia05.29.08
LGPA: FORSYTH SGN UTL 8-99|PMA SGN GWINNETT DO PE|ROW & UTL 8-04
Planning: Coordinate with PI 0004430 & 0002392
Prog. Develop: FUTURE ROW & CST AGREEMENTS TO BE SENT PER PMA 3-8-04.
Programming: #1 8-04; Need to align CST with PI 0004430 in next TIP update. 05/2005#2 3-08
Traffic Op: SEND PLANS FOR REVIEW WHEN PFPR SET|10/31/05 \$-
Utility: OCD SUE lvl B compl 06/2006-TBE
EMG: BRIDGE REPLACEMENT; PE BY COUNTY

R/W INFORMATION:

PREL PARCEL CT: 20 TOTAL PARCEL CT: ACQUIRED BY: LOC ACQ MGR: Byers, Kim (LOC)
UNDER-REVIEW CT: RELEASED CT: OPT-PEND CT: DEEDS CT: COND-PEND CT: COND-FILED CT:
RW CERT DT: ACQUIRED CT: RELOCATION CT:



Preconstruction Status Report By PI Number

Print Date: 06/24/2008

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
0004430	Gwinnett	SR 20 FM E OF BURNETTE TRAIL TO PEACHTREE IND BLVD-GRTA	Sep-08	Aug-11	Sep-10

MSL00-0004-00(430) **FIELD DIST:** 1
TIP #: GW-020A1 **TWIN:** 132985- **US:**
MPO: Atlanta TMA **EST DATE:** 4/16/2008
MODEL YR: 2020
PROJ MGR: McManus, Brad **PROJ LENGTH:** 3.71
PROG Reconstruction/Rehabili **TYPE** Widening
TYPE: tation **WORK:**
CONCEPT: **LET RESP:** LOC Congressional 7

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	2/4/2005	11/24/2005	100	GRTA BUS DEAL PROJECT
		Concept Meeting	12/2/2005	12/2/2005	100	
		Concept Submittal and Review	11/16/2005	12/20/2005	100	
		Receive Preconstruction Concept Approval	1/15/2006	2/8/2006	100	
		Management Concept Approval Complete	2/8/2006	2/17/2006	100	
7/9/2008	7/15/2008	Value Engineering Study	8/8/2007		97	
		Public Information Open House Held	7/19/2005		100	
9/10/2009	9/9/2009	Environmental Approval	3/15/2005		74	
6/17/2009	6/17/2009	Public Hearing Held			0	
8/22/2008	9/11/2008	Mapping			0	
9/15/2008	10/17/2008	Field Surveys/SDE			0	
7/3/2008	7/3/2008	Preliminary Plans	2/28/2006		100	
7/4/2008	8/8/2008	Underground Storage Tanks			0	
7/22/2008	11/3/2008	404 Permit Obtainment			0	
		PFPR Inspection	3/26/2008	3/26/2008	100	
8/8/2008	10/30/2008	R/W Plans Preparation			0	
12/26/2008	12/31/2008	R/W Plans Final Approval			0	
9/10/2009	9/14/2009	L & D Report Development and Approval			0	
1/1/2009	6/7/2011	R/W Acquisition			0	
12/18/2009	12/31/2009	Stake R/W			0	
		Soil Survey	2/2/2007	4/4/2008	100	
9/15/2009	7/19/2010	Final Design			0	
8/10/2010	8/11/2010	FFPR Inspection			0	
8/25/2010	9/7/2010	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: Y MEASUREMENT SYSTEM: E CONSULTANT: L UT EST:

PDD: BOND.
Bridge: NO BRIDGE REQUIRED
Design: McManus- need envir prel plans Gwinnett des PPI consultant
EIS: EA [Not Apvd |Not On Schd ROW| Alimia 6/19/08
LGPA: REV PMA SGN GWINNETT DO PE|ROW|UTIL & CST 4-20-04.
Planning: Coordinate with PI 132985 & 0002392
Prog. Develop: TOTAL \$20.1 MIL PER PMA
Programming: #1 10-07|#2 2-08
Traffic Op: SEND PLANS4REV,PFPR SET|10/31/05 \$-IPFPRsent3/20/08KW/NR
Utility: SUE Request Approved 02-18-04 OCD.
EMG: RECST/REHAB (WIDENING); PE BY COUNTY

R/W INFORMATION:

PREL PARCEL CT: 173 TOTAL PARCEL CT: 3 ACQUIRED BY: LOC ACQ MGR:
UNDER-REVIEW CT: 0 RELEASED CT: 3 OPT-PEND CT: 2 DEEDS CT: 1 COND-PEND CT: 0 COND-FILED CT: 0
RW CERT DT: ACQUIRED CT: 1 RELOCATION CT: 0

STP-0002-00(392) P.I. NO. 0002392 FORSYTH CO.

UTILITY OWNERS

- 1) POWER
SAWNEE EMC (SEMC) – DISTRIBUTION
CONTACT: GREGG FARR
543 ATLANTA HIGHWAY
CUMMING, GA 30040
TEL NO.: (678) 455-1305

- 2) TRANSMISSION
GEORGIA POWER – TRANSMISSION (GP)
CONTACT: DAN EVERITT
241 RALPH MCGILL BLVD. NE, BIN 20033
ATLANTA, GA 30308-3374
TEL NO.: (404) 506-2889

- 3) CABLE TV
COMCAST – ALL FACILITIES
CONTACT: MIKE WILKEY
697 MARIETTA HWY.,
CANTON, GA 30114
TEL NO.: (770) 479-1704

- 4) TELEPHONE
AT&T – ALL FACILITIES
CONTACT: DAVID GADDY
3514 OLD OAKWOOD Rd
OAKWOOD, GA 30566
TEL NO.: (770) 535-5001

- 5) FIBER
AT&T – ALL FACILITIES
CONTACT: GENE GEREN
360 GEES MILL BUSINESS PKWY,
CONYERS, GA 30013
TEL NO.: (770) 602-2121

6) GAS

ATLANTA GAS LIGHT (AGL) – ALL FACILITIES

CONTACT: MIKE ALEXANDER

TEN PEACHTREE PLACE,

ATLANTA, GA 30309

TEL NO.: (404) 584-4398

7) WATER

FORSYTH COUNTY PUBLIC UTILITIES –

CONTACT: JOHNNY MILWOOD

110 EAST MAIN STREET, SUITE 150

CUMMING, GA 30040

TEL NO.: (770) 781-2160

8) WATER & SEWER

CITY OF CUMMING PUBLIC UTILITIES

CONTACT: FRANKLIN WAGNER

100 MAIN STREET,

CUMMING, GA 30040

TEL NO.: (770) 781-2020

BRST-054-1(63) GWINNET CO. 132985

- 1) ATLANTA GAS LIGHT (AGL) – GAS
CONTACT: MR. MIKE WILSON
P.O. BOX 4569, LOCATION 1345
ATLANTA, GA 30302
TEL. NO.: (678) 409-8054
NOTE: WEST OF CHATTAHOOCHEE
- 2) CHARTER COMMUNICATIONS (CC) – CATV
CONTACT: MR. JIMMY PRICE
1925 BRECKENRIDGE PLAZA, SUITE 100
DULUTH, GA 30096
TEL. NO.: (404) 597-2712
NOTE: ALL CATV IS CHARTER UNLESS OTHERWISE NOTED.
- 3) CITY OF SUGAR HILL PUB. UTILITIES (COSH) – GAS
CONTACT MR. BOB HAIL, CITY MANAGER
4988 WEST BROAD STREET
SUGAR HILL, GA 30518
TEL. NO.: (770) 945-6716
NOTE: EAST OF CHATTAHOOCHEE
- 4) FORSYTH CO. WATER (FC) – WATER
CONTACT: MR. JEFF SAMPLES
110 EAST MAIN STREET, SUITE 150
CUMMING, GA 30040
TEL. NO.: (770) 781-2160 EXT. 2790
NOTE: WEST OF CHATTAHOOCHEE
- 5) GWINNET COUNTY PUB. UTILITIES (GC) – WATER & SEWER
CONTACT: MR. HANK HOERTZ
684 WINDER HIGHWAY
LAWRENCEVILLE, GA 30045
TEL. NO.: (678) 376-7127
NOTE: EAST OF CHATTAHOOCHEE

6) SAWNEE EMC (SEMC) – POWER

CONTACT: MR. GREG FARR

543 ATLANTA HIGHWAY

CUMMING, GA 30040

TEL. NO.: (678) 455-1305

NOTE: ALL POWER IS SAWNEE UNLESS OTHERWISE NOTED.

7) BELLSOUTH (BST) – TELEPHONE

CONTACT: MR. EDDIE KING

2310 PARKLAKE DR, ROOM 530

ATLANTA, GA 30345

TEL. NO.: (770) 493-2006

NOTE: ALL PHONE IS BELLSOUTH UNLESS OTHERWISE NOTED.

MSL-0004-00(430) P.I. NO. 0004430 GWINNET CO.

POWER

GEORGIA POWER CO. (GPC) – DISTRIBUTION
FROM 356' WEST OF PINEDALE CIRCLE TO PEACHTREE INDUSTRIAL BLVD.
CONTACT: HAROLD COX
241 RALPH MCGILL BLVD N.E.
ATLANTA, GA 30308-3374
TEL NO.: (404) 506-4401

POWER

SAWNEE EMC (EMC) – DISTRIBUTION
FROM BURNETTE TRAIL TO 356' WEST PINEDALE CIRCLE
CONTACT: JAY NELMS
3000 OLD MILTON PKWY.
ALPHARETTA, GA 30004
TEL NO.: (770) 382-0531

CABLE TV

PRESTIGE CABLE – ALL FACILITIES
CONTACT: JON OSCHER
2178 MARIETTA HWY.
CANTON, GA 30114
TEL NO.: (770) 382-0531

TELEPHONE

BELLSOUTH (BST) – ALL FACILITIES
CONTACT: BOBBY FEREBEE
5556 TRACE VIEWS DRIVE
NORCROSS, GA 30071
TEL NO.: (404) 358-0897

GAS

CITY OF SUGARHILL – ALL FACILITIES
CONTACT: JOHNNY UPCHURCH
4988 WEST BROAD ST
SUGARHILL, GA 30518
TEL NO.: (770) 271-2137

SEWER

GWINNET COUNTY PUBLIC UTILITIES – ALL FACILITIES

CONTACT: JOHN ARCHER

446 WEST CROGAN ST

LAWRENCEVILLE, GA 30045

TEL NO.: (678) 376-6906

NOTE: SS LINES QUALITY LEVEL 'C'

WATER

GWINNET COUNTY PUBLIC UTILITIES – ALL FACILITIES

CONTACT: JOHN ARCHER

446 WEST CROGAN ST

LAWRENCEVILLE, GA 30045

TEL NO.: (678) 376-6906

POWER

GEORGIA POWER CO. (GPC) – TRANSMISSION

(SEE SHEETS 38A, 36B & 36C)

CONTACT: HAROLD COX

241 RALPH MCGILL BLVD N.E.

ATLANTA, GA 30308-3374

TEL NO.: (404) 506-4401

Road Designs Response to Value Engineering Study on Project
STP00-0002-00(392), BRST0-0054-01(063), MSL00-0004-00(430)
PI No's 0002392, 132985, 0004430

Alternative A-2

Description: Reduce the right of way to the back of the shoulder and use easement elsewhere
Cost savings: for each project in order is \$2,414,000 \$339,200, \$4,973,000 total = \$7,726,200
Response: Permanent drainage structures, and slopes steeper than 3:1 require intensive maintenance and therefore need to be placed on right of way instead of easement. Furthermore if permanent easement is required its cost is 80% of R/W cost.

The recommendation of the Road Design Office is: Yes, the location of rights of way is still being determined and will not be exactly as shown in the plans presented to the VE team. This alternative will be used throughout the project where viable.

Alternative A-4

Description: Reduce the 16 foot shoulder to a 12 foot shoulder by reducing the 6 foot grass strip.
Cost savings: for each project in order is \$1,868,000 \$260,000 \$2,371,000 total = \$4,499,000
Response: The 16' shoulder helps bring the facility closer to the clear-zone requirements of the Roadside Design Guide (20'). A 6' grass strip is preferred between the back of curb and sidewalk for maintenance issues. There also exists around 34 driveways on PI No. 0002392 and around 89 on PI No. 0004430 where the sidewalk would have to wrap around the driveways if the shoulder is reduced to 12'. Utilities such as telephone, water, cable, and power use this shoulder for the location of their facilities. Implementing this alternative would mean that additional easement will be needed, and easement and right of way will cost more. In addition to the above costs the right of way acquisition would be delayed by at least 6 months to a year and the cost of property would increase (because of the fast pace of development in the area).

The recommendation of the Road Design Office is: Not to implement this recommendation.

Alternative B-1

Description: Reduce the lane widths from 12 to 11 feet on the new pavement construction.
Cost savings: for each project in order is \$724,600 \$96,700 \$923,300 total= \$1,744,600
Response: The truck traffic is 7.5%. The road is not considered a bike route and therefore does not have a bike lane. Bicycle riders in traffic will be left closer to the vehicles in this alternative. As stated above in the response to Alternative A-4, there are 123 driveways on these projects.

The recommendation of the Road Design Office is: To implement this recommendation.

Alternative B-2

Description: Realign Burnette Trail Road 300 feet shorter with a maximum grade of 15%.

Cost savings: \$258,800

Response: The alignment of Burnette Trail Road was done in order to provide for an 11.3% grade. AASHTO recommends that for a 20 mph road in rolling terrain that the maximum grade be 11% and for a 15 mph road that it be 12%. Using a 15% maximum grade is only recommended for mountainous terrain. Burnette Trail Road will be realigned to shorten its length. However its exact course will be determined by more intensive engineering study and has yet to be finalized.

The recommendation of the Road Design Office is: To partially implement this recommendation

Alternative B-3

Description: Retain Echols Road and shift the median opening to the west.

Cost savings: \$610,000

Response: Keeping the existing configuration of Echols Road and Holy Court mean that two roads will be within 465 feet of each other. Holly Court intersects SR 20 at around 60 degree skew realigning Holly Court would make this intersection around 90 degrees. Also this would give both Holly Court and Echols Road a median opening. This alternative creates a need for U turns. Also these are local roads servicing several subdivisions and would cause motorist to make U-turns at peak hours. Also the common intersection has been shown to the property owners affected an understanding has been reached.

The recommendation of the Road Design Office is: Not to implement this recommendation.

Alternative C-1

Description: Optimize the SR 20 bridge alignment to reduce span length

Cost savings: \$110,000

Response: The cost savings from a shorter bridge would be expended in the increased cost of embankment, right of way, and detour roads and bridges required to move the alignment. This alternative will introduce a curve at James Burgess Road, cause the relocation of the Rainbow Ranch trout farm, impact Carnets Car Wash at James Burgess Road and incur loss of business expenses.

The recommendation of the Road Design Office is: Not to implement this recommendation

Alternative C-2

Description: Reduce travel lane width from 12 to 11 feet on the bridge

Cost savings: \$301,000

Response: The discussion listed with Alternative B1 applies to this alternative as well. See B1.

The recommendation of the Road Design Office is: To implement this recommendation
Alternative C-3A

Description: Reduce the sidewalk from 10 feet to 6 feet.

Cost savings: \$602,000

Response: Our Bridge office has concurred with this recommendation since it matches our current guidelines for bridges. The 10' sidewalk may have been a recommendation from one of the county governments for the purpose of including a multiuse path along the corridor in the future.

The recommendation of the Road Design Office is: To implement this recommendation.

Alternative C-3B

Description: Eliminate the sidewalk on the bridge and reduce it to 6 feet on the other

Cost savings: \$1,053,000

Response: In order to implement this alternative we will have to provide a crosswalk at both ends of the bridge across an unsignalized road with heavy traffic (over 40,000vpd). This office feels that this alternative creates a serious safety concern for pedestrians.

The recommendation of the Road Design Office is: Not to implement this recommendation.

Alternative C-5

Description: Reduce or eliminate spanning the flood plain

Cost savings: \$2,200,000

Response: The first 2 spans will be eliminated. Our Bridge office agrees with this recommendation.

The recommendation of the Road Design Office is: To implement this recommendation following the Bridge Design Office's direction.

Alternative C-7

Description: Use High strength concrete girders

Cost savings: \$1,209,000

Response: Our Bridge Office has stated that the longest concrete girder span in the state is around 165 feet. This would mean that piers would need to be placed in the river. The idea of piers being placed in the river is currently under debate between Paul Liles and Glenn Bowman.

The recommendation of the Road Design Office is: This will be determined our Bridge Office and OEL

Alternative C-8A

Description: Reduce the inside shoulder width to 4 feet and retain the two sidewalks at 6 feet

Cost savings: \$1,505,000

Response: Reducing the inside shoulder width will leave no room for disabled vehicles to leave the travel way. Bridge Design Office recommends reducing the sidewalk widths to 6 feet.

The recommendation of the Road Design Office is: To partially implement this recommendation by reducing the sidewalk width to 6 feet.

Alternative C-8B

Description: Reduce the inside shoulder to 2 feet and remove sidewalks from both bridges

Cost savings: \$2,709,000

Response: This idea leaves the bridges vulnerable to immobilized vehicles creating an impasse. It further prevents pedestrians from utilizing the bridge to cross the river therefore leaving the sidewalks approaching the river useless.

The recommendation of the Road Design Office is: Not to implement this recommendation see C-8A.

Alternative C-11

Description: Lower the road profile at bridge location

Cost savings: \$288,800

Response: Staging on this project is extremely important because of the traffic flow and being one of the few routes across the Chattahoochee River. The cross over from north to south is in close proximity to the bridge. Lowering the profile of the road causes significant staging issues. Also this may not be feasible because of hydraulic concerns. As part of mitigation for using National Park Service land a trail could be built under the bridge in its present design. If the bridge is lowered this will not be possible.

The recommendation of the Road Design Office is: Not to implement this recommendation

Alternative C-13

Description: Use drain scuppers where allowed

Cost savings: \$232,000

Response: The enclosed drainage system originally designed is being done to capture the rain water on the bridges and route it through one of the water quality ponds for treatment. This is done as mitigation for utilizing NPS land for highway use.

The recommendation of the Road Design Office is: Not to implement this recommendation

Alternative G1.1 and G1.3

Description: Optimize storm drain layout

Cost savings: \$569,400

Response: The drainage is currently being designed and a number of the suggestions made before the PFPR. Design of the drainage will continue as we work with our Construction Office to optimize the drainage in terms of cost, and maintaining traffic, since open cuts in the existing road are problematic for traffic.

The recommendation of the Road Design Office is: To partially implement this recommendation

Alternative G2.3

Description: Do not use a bottomless culvert

Cost savings: No cost savings was determined

Response: We plan to implement this recommendation

The recommendation of the Road Design Office is: To implement this suggestion